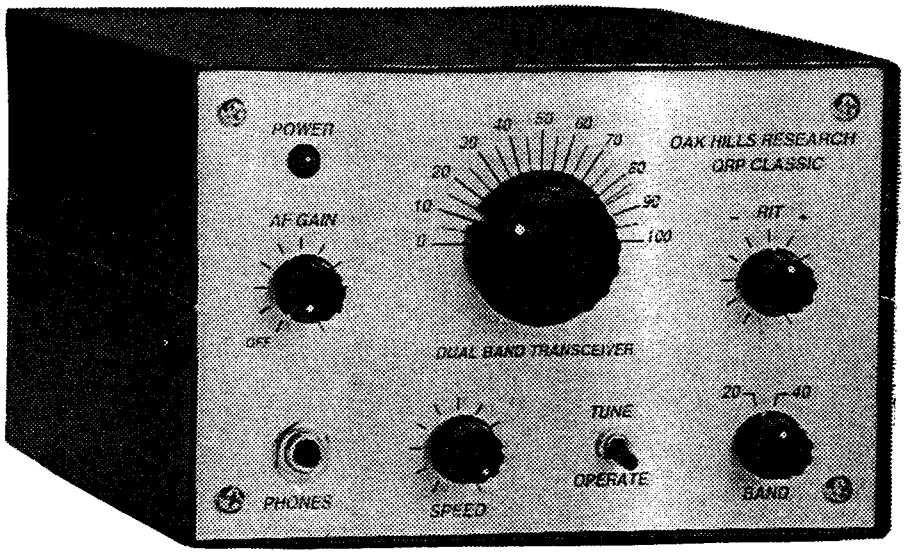
ASSEMBLY INSTRUCTIONS

QRP CLASSIC CL2040



Oak Hills Research
20879 Madison Street
Big Rapids, MI 49307

OSCILLATOR BOARD PARTS LIST

RESISTORS & PC POTS
ALL RESISTORS ARE 1/4W 5%

QTY	PART#	DESCRIPTION	REF DES#
1	6-150-14	15 ohm (brn-grn-blk	R100
2	6-470-14	47 ohm (yel-vio-blk)	R108,R113
4	6-101-14	100 ohm (brn-blk-brn)	R106,R117,R118,R124
1	6-271-14	270 ohm (red-vio-brn)	R101
2	6-471-14	470 ohm (yel-vio-brn)	R111,R134
2	6-561-14	560 ohm (grn-blu-brn)	R137,R138
3	6-102-14	1K ohm (brn-blk-red)	R128,R130,R136
1	6-152-14	1.5K ohm (brn-grn-red)	R110
4	6-222-14	2.2K ohm (red-red-red)	R120,R121,R122,R131
4	6-332-14	3.3K ohm (org-org-red)	R102,R107,R109,R123
2	6-472-14	4.7K ohm (yel-vio-red)	R103,R104
1	6-822-14	8.2K ohm (gry-red-red)	R133
2	6-103-14	10K ohm (brn-blk-org)	R116,R126
2	6-123-14	12K ohm (brn-red-org)	R119,R132
1	6-153-14	15K ohm (brn-grn-org)	R129
5	6-104-14	100K ohm (brn-blk-yel)	R105,R115,R125,R127,R135
1	6-105-14	1M ohm (brn-blk-grn)	R114
1	POT 7	10K ohm pot (103) (see key# A1)	R112

OSCILLATOR BOARD PARTS LIST

QTY	PART#	DESCRIPTION	KEY#	REF DES#
DIODES				
12	1N4148	Silicon Diode	A10	D100,D101,D102, D103,D104,D105, D107,D108,D109, D110,D111,D112
1	MV2109	Varactor Diode	A11	D106
ICs & SOCKETS				
1	NE602AN	8 Pin IC	A12	U101
1	ICS01	8 Pin IC Socket	A13	
MISCELLANEOUS				
1	K134	2" large red wire		

RECEIVER BOARD PARTS LIST

RESISTORS & PC POTS
ALL RESISTORS ARE 1/4W 5%

QTY	PART#	DESCRIPTION	REF DES#
1	6-279-14	2.7 ohm (red-vio-gld)	R230
1	6-569-14	5.6 ohm (grn-blu-gld)	R200
1	6-100-14	10 ohm (brn-blk-blk)	R210
2	6-330-14	33 ohm (org-org-blk)	R201,R204
2	6-470-14	47 ohm (yel-vio-blk)	R212,R215
1	6-560-14	56 ohm (grn-blu-blk)	R202
1	6-680-14	68 ohm (blu-gry-blk)	R206
2	6-101-14	100 ohm (brn-blk-brn)	R239,R247
1	6-221-14	220 ohm (red-red-brn)	R245
2	6-271-14	270 ohm (red-vio-brn)	R208,R209
2	6-471-14	470 ohm (yel-vio-brn)	R213,R216
1	6-561-14	560 ohm (grn-blu-brn)	R203
8	6-102-14	1K ohm (brn-blk-red)	R205,R214,R217,R233, R236,R246,R249,R254
2	6-222-14	2.2K ohm (red-red-red)	R211,R241
1	6-272-14	2.7K ohm (red-vio-red)	R256
1	6-332-14	3.3K ohm (org-org-red)	R225
1	6-472-14	4.7K ohm (yel-vio-red)	R231
1	6-682-14	6.8K ohm (blu-gry-red)	R207
5	6-103-14	10K ohm (brn-blk-org)	R221,R222,R223,R229 R235
1	6-153-14	15K ohm (brn-grn-org)	R251
3	6-223-14	22K ohm (red-red-org)	R237,R240,R250
1	6-273-14	27K ohm (red-vio-org)	R232
8	6-333-14	33K ohm (org-org-org)	R226,R227,R228,R242, R243,R244,R252,R253
2	6-513-14	51K ohm (grn-brn-org)	R234,R248
1	6-104-14	100K ohm (brn-blk-yel)	R238
1	6-394-14	390K ohm (org-wht-yel)	R220
1	6-105-14	1M ohm (brn-blk-grn)	R255
1	6-155-14	1.5M ohm (brn-grn-grn)	R218
2	POT 7	10K ohm pot (103) (see key# A1)	R219,R224

T/R BOARD PARTS LIST

RESISTORS & POTS
ALL RESISTORS ARE 1/4W 5%

QTY	PART#	DESCRIPTION	REF DES#
1	6-129-14	1.2 ohm (brn-red-gld)	R304
1	6-339-14	3.3 ohm (org-org-gld)	R313
2	6-100-14	10 ohm (brn-blk-blk)	R301,R324
1	6-270-14	27 ohm (red-vio-blk)	R311
2	6-470-14	47 ohm (yel-vio-blk)	R308,R339
1	6-820-14	82 ohm (gry-red-blk)	R303
3	6-101-14	100 ohm (brn-blk-brn)	R318,R320,R325
1	6-561-14	560 ohm (grn-blu-brn)	R331
1	6-680-14	680 ohm (blu-gry-brn)	R319
14	6-102-14	1K ohm (brn-blk-red)	R300,R302,R306,R309,R310, R312,R315,R316,R317,R323, R332,R334,R336,R340
2	6-222-14	2.2K ohm (red-red-red)	R338,R342
1	6-332-14	3.3K ohm (org-org-red)	R330
4	6-472-14	4.7K ohm (yel-vio-red)	R333,R335,R337,R341
2	6-562-14	5.6K ohm (grn-blu-red)	R307,R322
5	6-103-14	10K ohm (brn-blk-org)	R314,R326,R327,R328,R329
1	6-473-14	47K ohm (yel-vio-org)	R321
1	K228	100 ohm PC pot w/shaft (see key# C1)	R305

QTY	PART#	DESCRIPTION	KEY#	REF DES#
NP0 MONO CAPS				
1	MC01	1pF (109)	A2	C321
1	MC04	3.3pF (339)	A2	C323
1	MC10	10pF (100)	A2	C317
2	MC11	12pF (120)	A2	C305,C331
2	MC12	15pF (150)	A2	C312,C332
2	MC16	33pF (330)	A2	C307,C340
1	MC19	56pF (560)	A2	C328
2	MC20	68pF (680)	A2	C313,C333

PARTS PICTORIAL

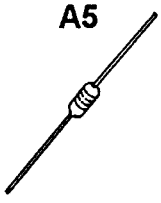
A1

A2

A3

A4

A5



A6

A7

A8

A9

A10

A11

A12

A13

Always count the number of pins on the socket.

B1

B2

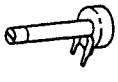
B3

B4

B5

B6

C1



C2

C3

C4

C5

NO PART

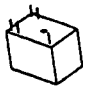
C6

C7

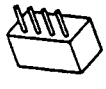
C8

C9

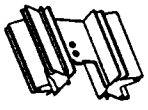
C10



C11



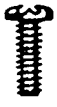
C12



D1

D2

D3



D4

D5

ASSEMBLY PICTORIAL

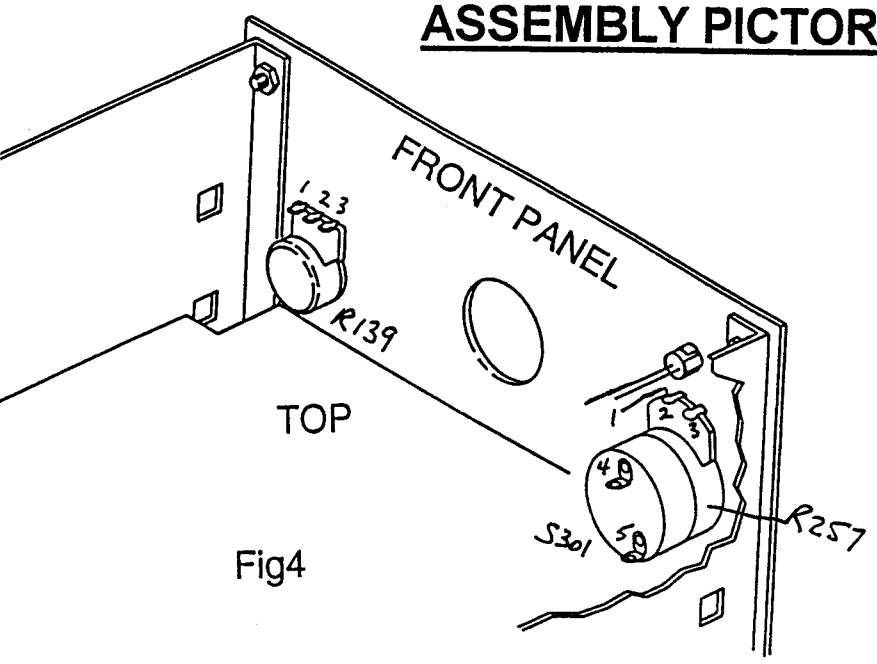
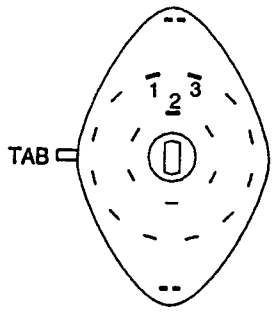


Fig4



CUTOFF ALL UNMARKED PINS FLUSH WITH BACK OF SWITCH. DO NOT CUT OFF PINS 1, 2 AND 3.

REAR VIEW
S300
Fig 6

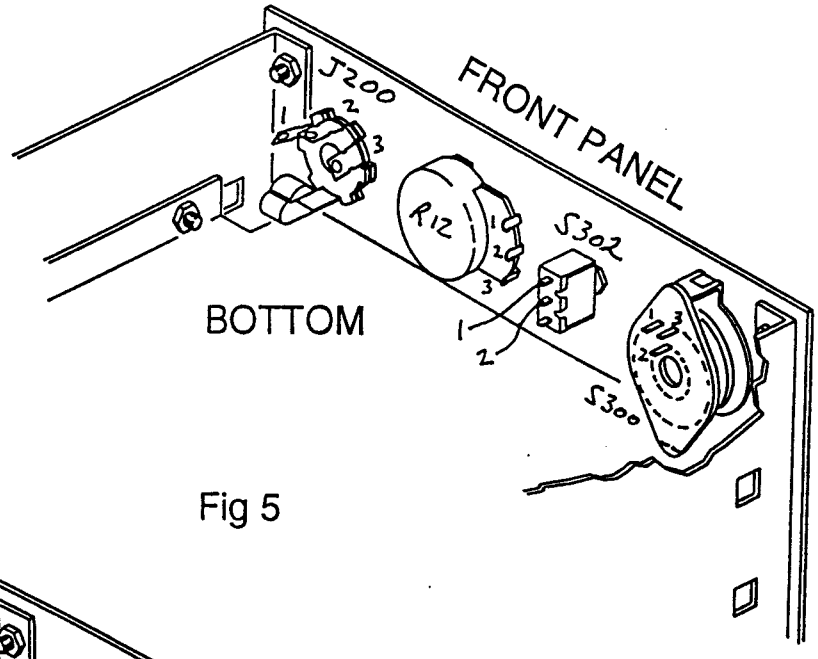


Fig 5

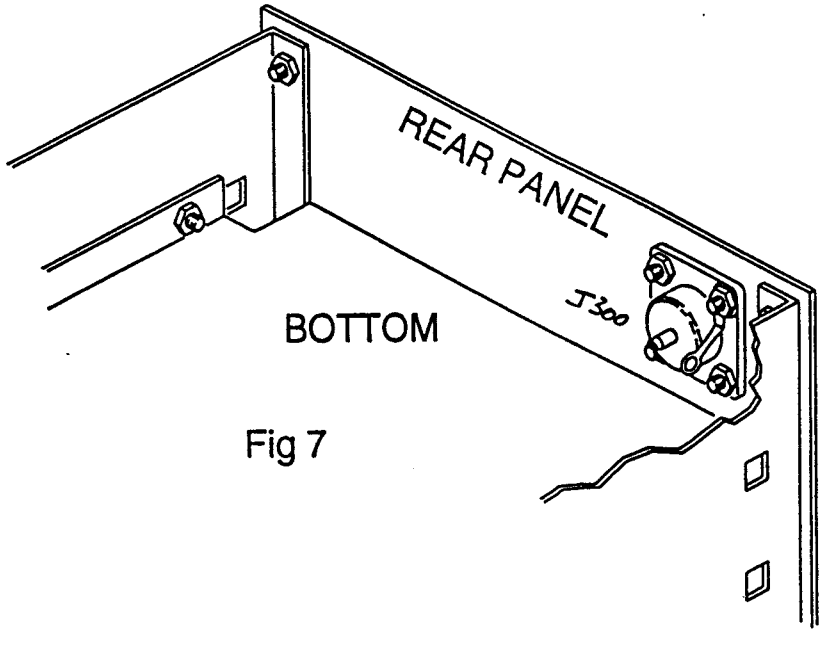
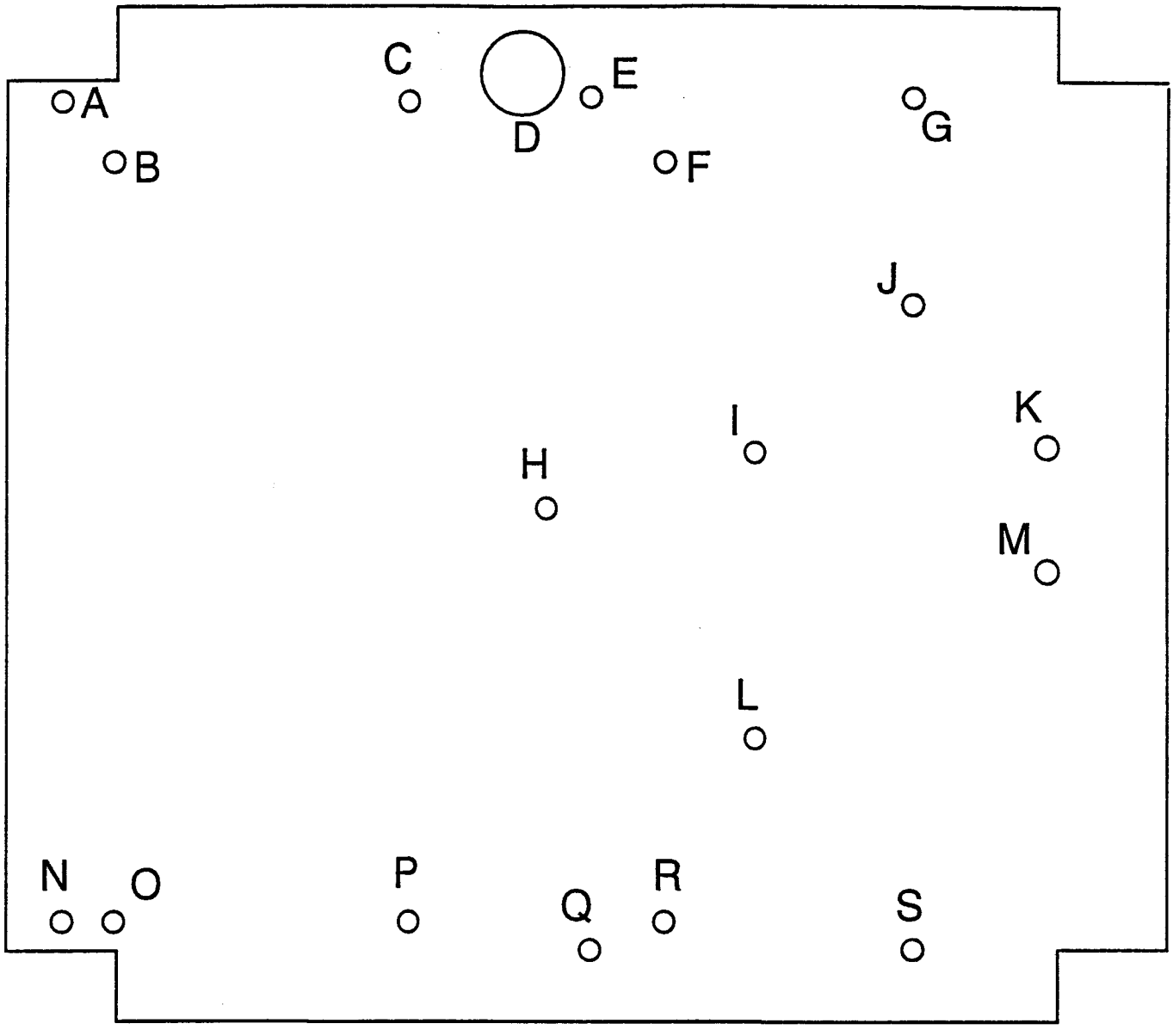


Fig 7



TOP VIEW
CHASSIS

ASSEMBLY PICTORIAL

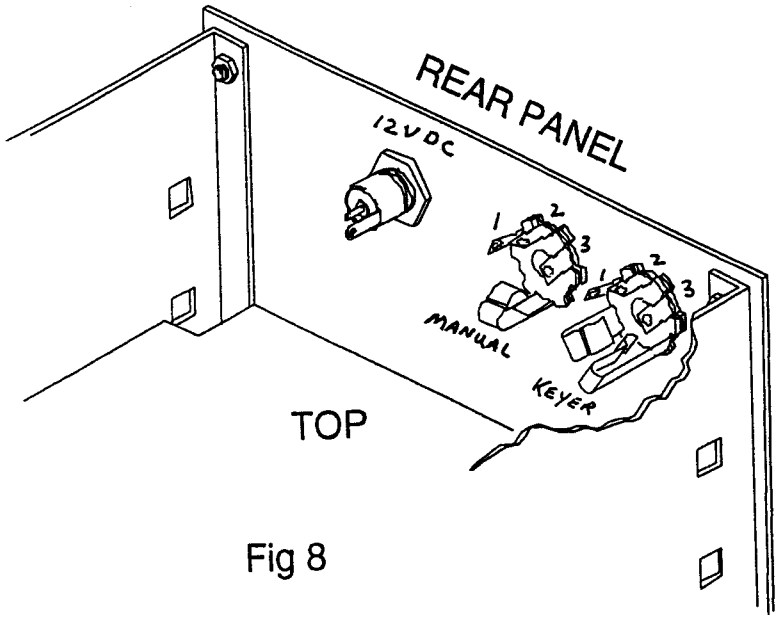


Fig 8

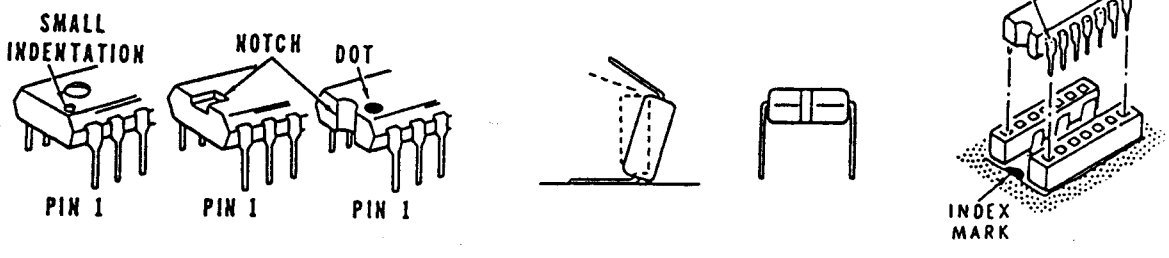
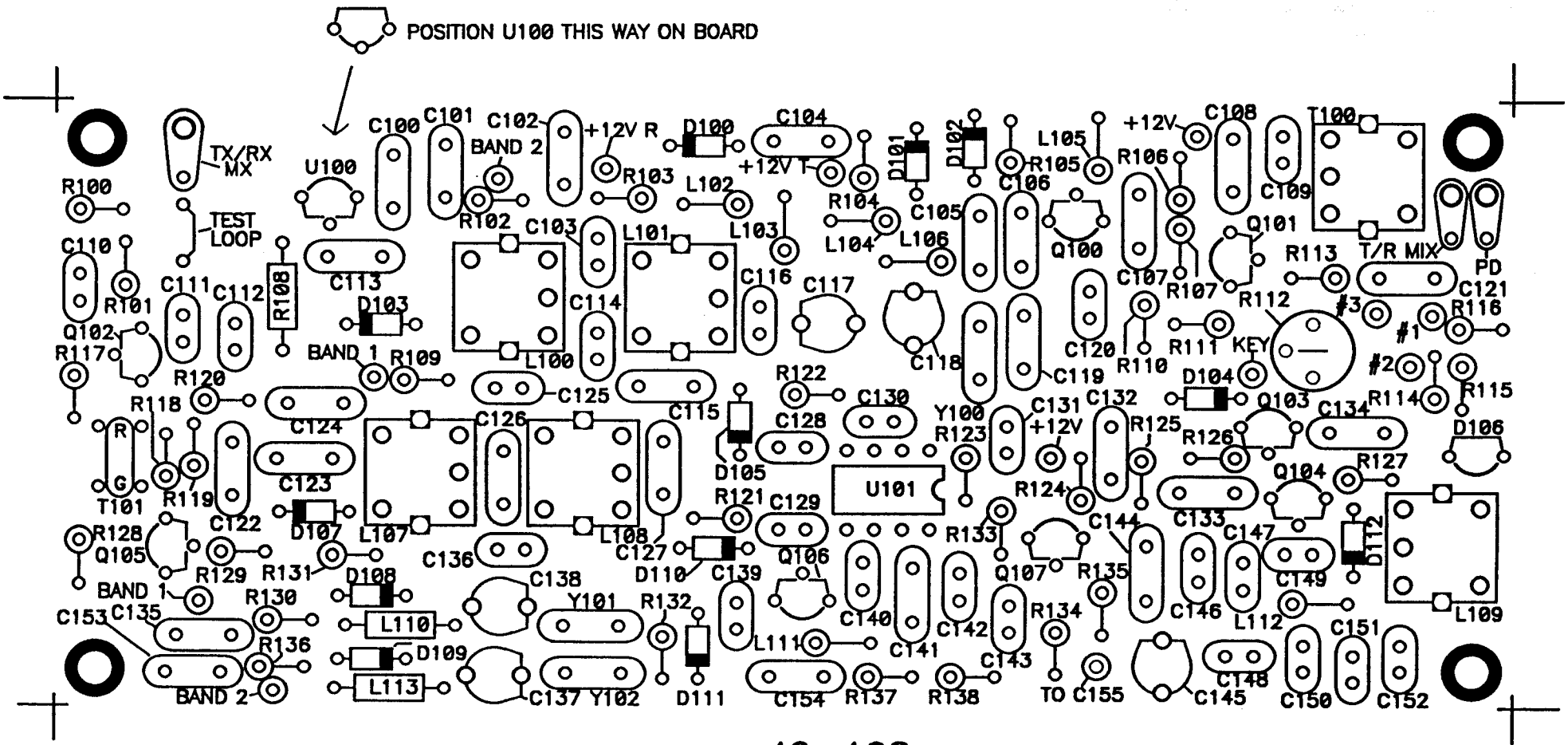
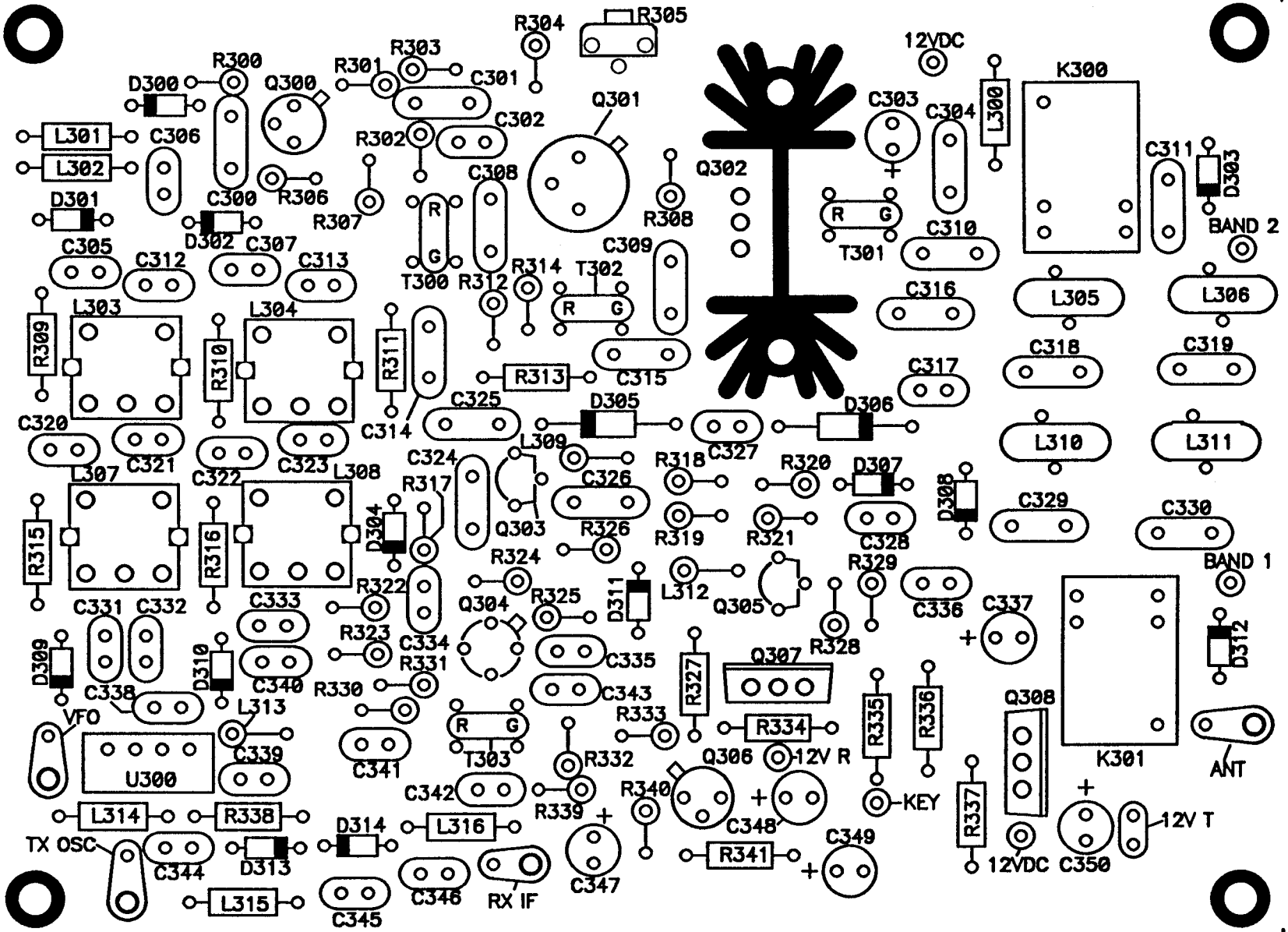


Fig 9

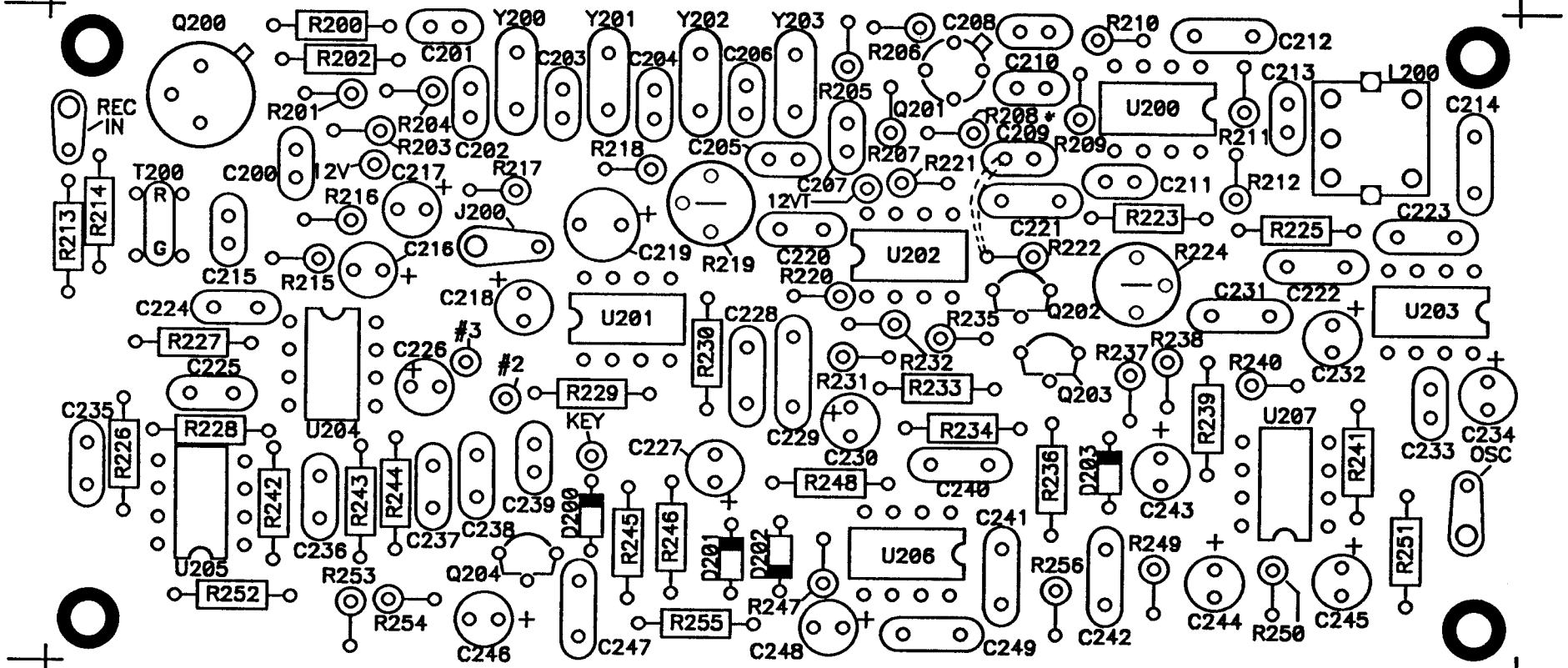


40-108
OSCILLATOR BOARD



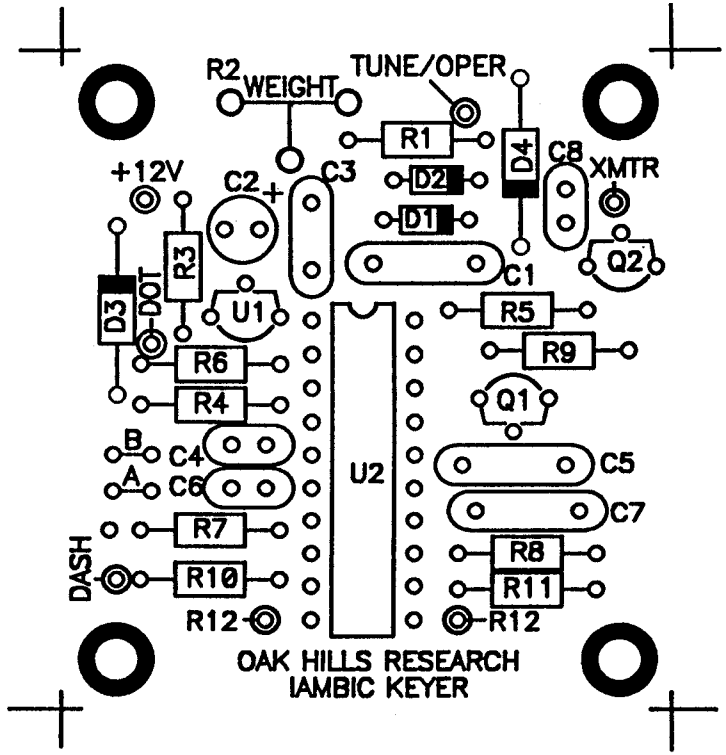
40–109
T/R BOARD

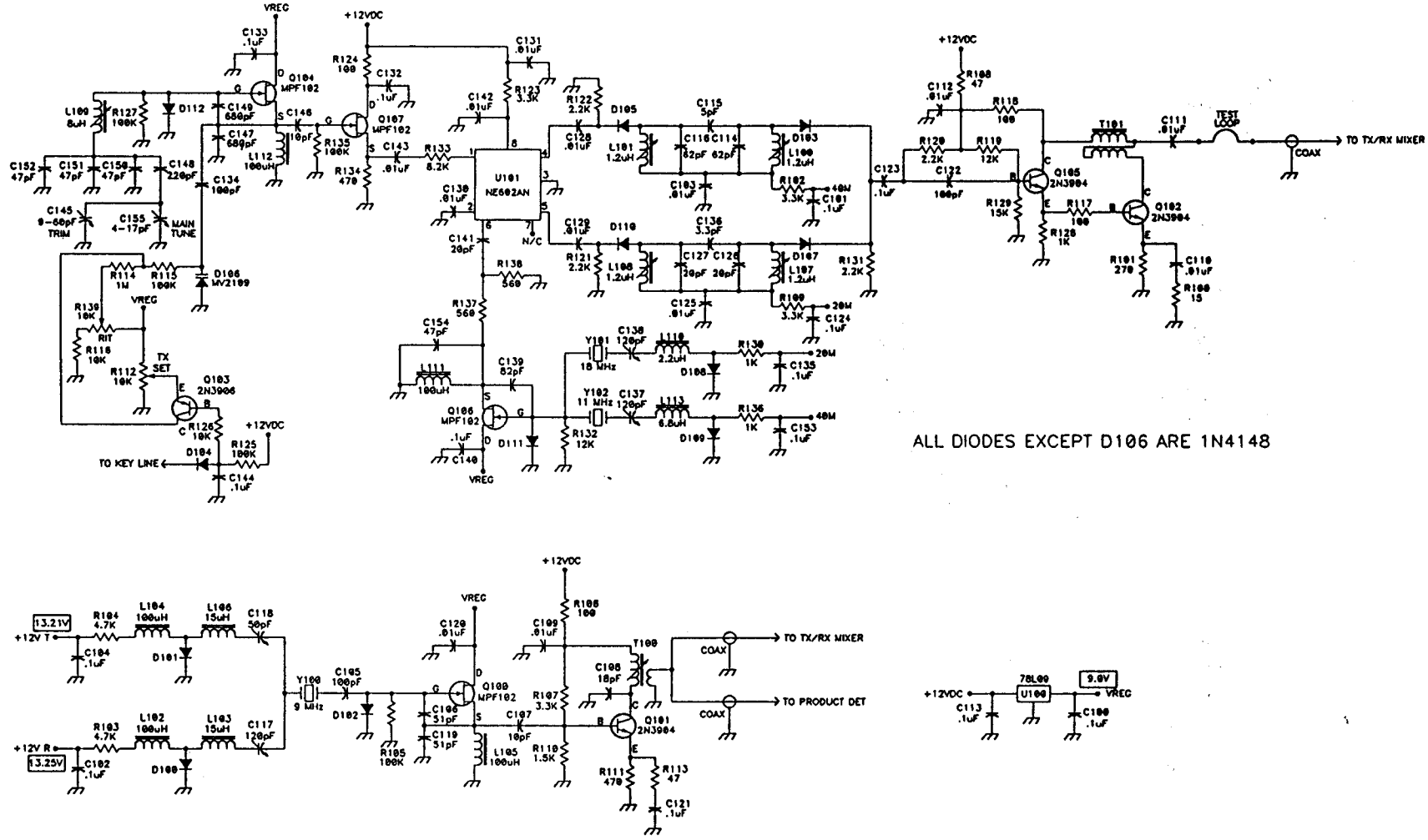
* NOTE: FOLLOW SPECIAL INSTRUCTIONS WHEN INSTALLING C209



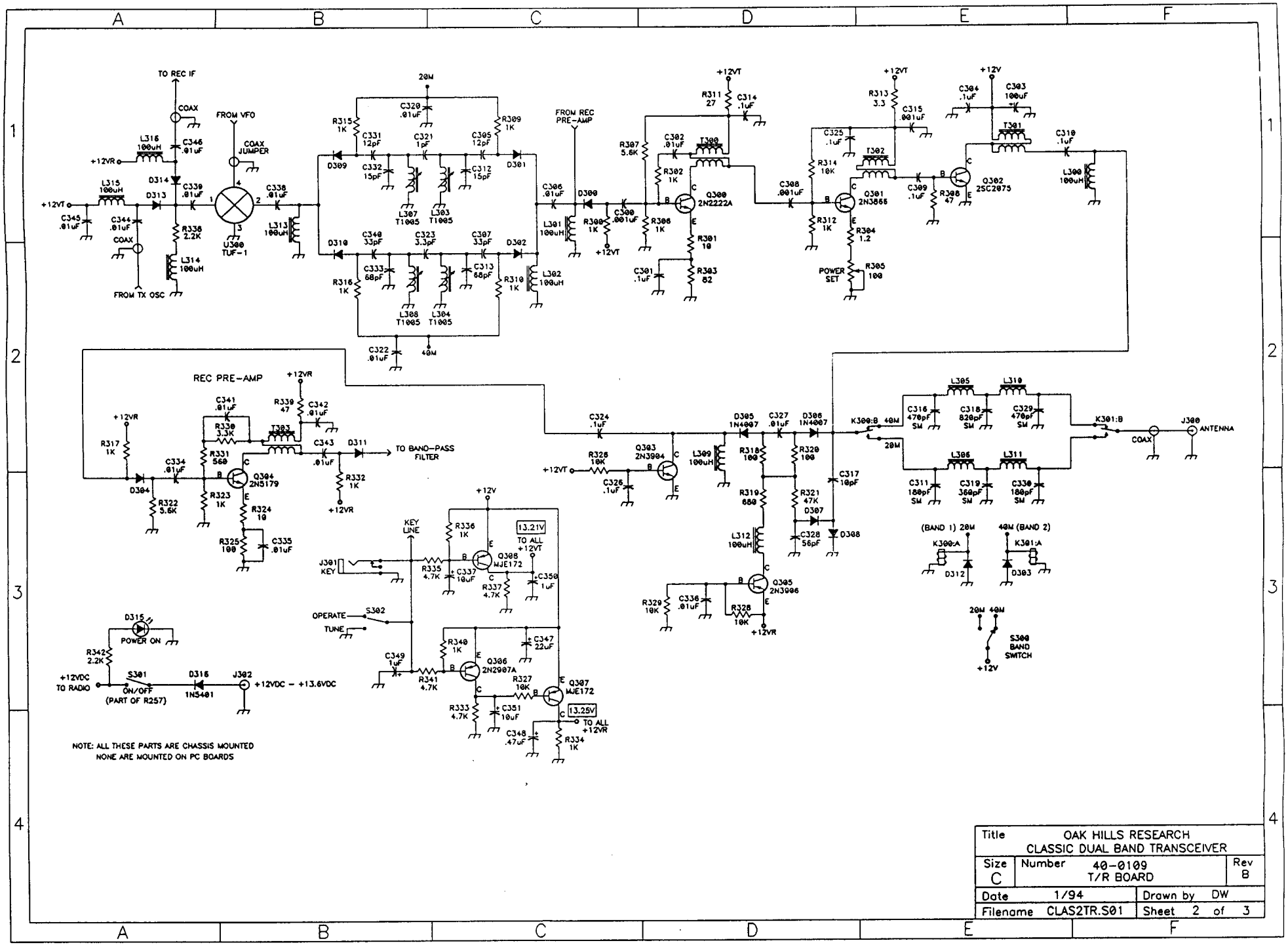
40–110

RECEIVER BOARD

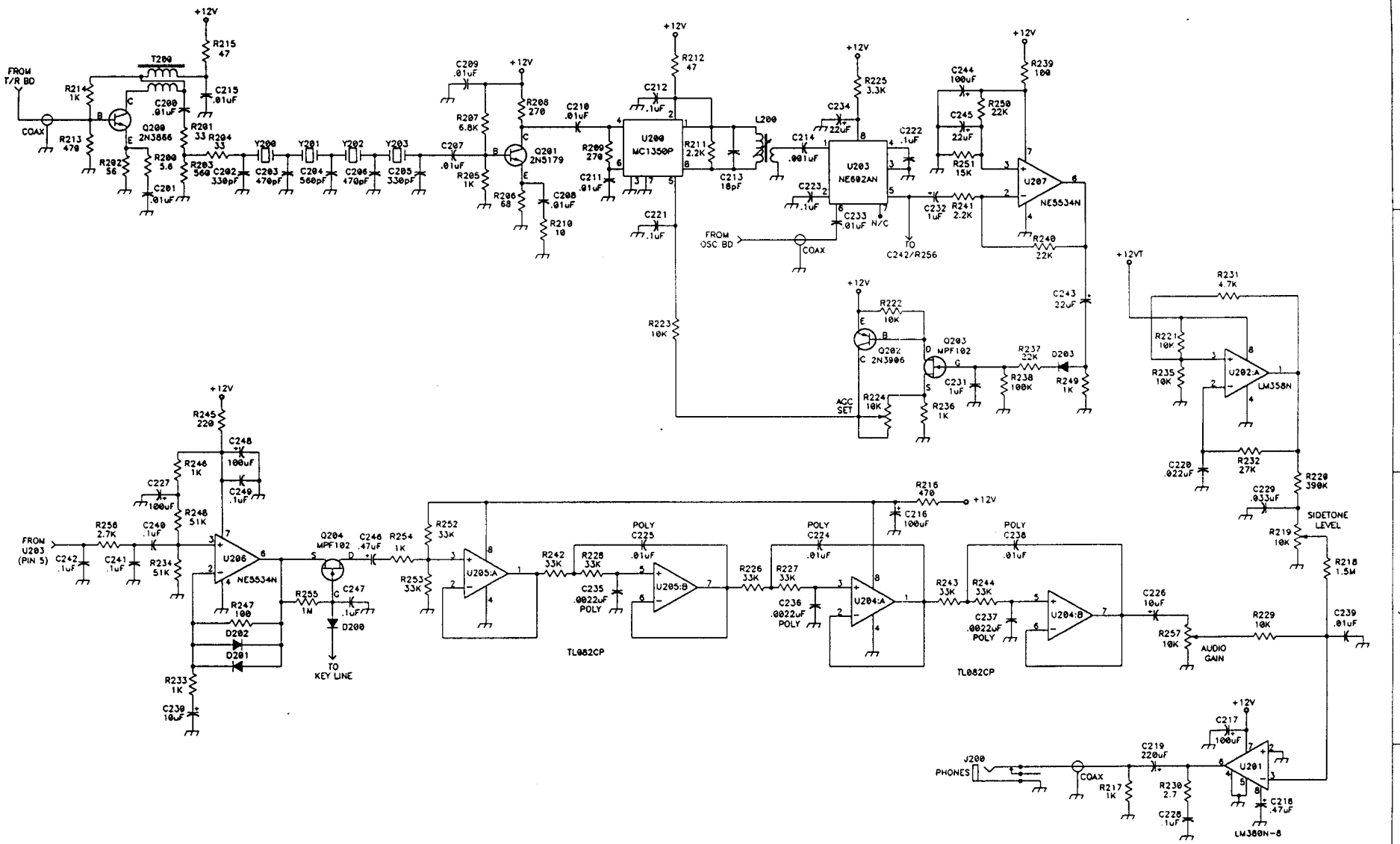

R2
WEIGHT
TUNE/OPER
R1
D4
C8
XMTR
+12V
C2
C3
D2
D1
Q2
C1
R3
D3
DOT
U1
R5
R9
R6
R4
Q1
B
C4
C5
A
C6
U2
C7
R7
R8
DASH
R10
R11
R12
R12
OAK HILLS RESEARCH
IAMBIC KEYER



Title	OAK HILLS RESEARCH CLASSIC DUAL BAND TRANSCEIVER		
Size C	Number	40-0108 OSCILLATOR BOARD	Rev B
Date	1/94	Drawn by	DW
Filename	CLAS1OSC.S01	Sheet 1 of 3	



Title	OAK HILLS RESEARCH CLASSIC DUAL BAND TRANSCEIVER		
Size C	Number 40-0109 T/R BOARD		Rev B
Date	1/94	Drawn by	DW
Filename	CLAS2TR.S01	Sheet	2 of 3



Title	OAK HILLS RESEARCH CLASSIC DUAL BAND TRANSCEIVER		
Size C	Number	40-110 REC BOARD	Rev B
Date	1/94	Drawn by	DW
Filename	CLAS3RX.S01	Sheet	3 of 3